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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,660	12/15/2003	Hajime Nakagawa	FS-F03216-01	7673
37398	7590	09/08/2005	EXAMINER	
TAIYO CORPORATION 401 HOLLAND LANE #407 ALEXANDRIA, VA 22314			CHEA, THORL	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

T.D

Office Action Summary	Application No.	Applicant(s)	
	10/734,660	NAKAGAWA ET AL.	
	Examiner	Art Unit	
	Thorl Chea	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-13 and 15-24 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-7,9-13 and 15-24 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-7, 9-13, 15-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed fails to provide support for the term “an aqueous solvent-system photothermographic material” presented in claims 1, 3 and 13. Page 100, lines 23-24 discloses, “an aqueous solvent system is used as the solvent of a coating solution. An aqueous solvent means water or the mixture of water and 70 % by weight or less of a water-miscible organic solvent”. There is no an aqueous solvent-system photothermographic material terminology disclosed therein. The scope of the aqueous solvent-system photothermographic material may encompasses the scope of the photothermographic material containing the solvent or water therein beyond the use of the aqueous solvent system used in the coating process. Therefore, the use of such terminology raises new concept beyond the use of aqueous solvent system in the coating process.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1752

4. Claims 1-7, 9-13, 15-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The scope of protection sought for new terminology aqueous solvent-system photothermographic material is unclear since the specification fails to clearly define the scope thereof.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-7, 9-13 15-24 is rejected under 35 U.S.C. 103(a) as being unpatentable Oya et al (US 2001/0051319A1). Oya et al discloses a photothermographic substantially as claimed. See page 37, [0122] to [0124] which discloses a photothermographic material containing a silver salt of an organic acid, a reducing agent, a photosensitive silver halide, at least on protective layer provide on the image forming layer. The polymer latex is used as binder of the image forming layer, protective layer and back layer. The aqueous system utilizing a solvent (dispersing medium) containing water as main component. The polymer latex may be used may be used not only in the image forming layer, but also in the protective layer and back layer. The term "polymer latex" used here means a dispersion comprising hydrophobic water-insoluble polymer dispersed in water-soluble dispersing medium. The polymer latex is preferably used as in the protective layer and back layer when the photographic material is used for printing used in which dimensional change caused. Pages 40-41, paragraphs [0167] to [0170] disclose the use

Art Unit: 1752

of water-soluble polymer as thickener for imparting coating property. The polymers may be either naturally occurring polymers or synthetic polymers and types thereof are not particularly limited. The naturally occurring polymers including starches, seaweeds, vegetable adhesive substances (gum Arabic etc ..), animal proteins (glue, casein, gelatin, egg white) and adhesive fermentation product (pullulan, dextran) and semi-synthetic cellulose. Page 39, [0141] the protective layer is a layer on the Image forming layer, and it may consist of two or more layer. In such a case, it is preferred that polymer latex should be used at least one layer, especially the outermost protective layer. See also the surfactant containing perfluoroalkylene group is disclosed on page 42, paragraph [0177]; and the silver salt of an organic acid having silver behenate content of 85 mole % or more on page 32, [0061]. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to include the water-soluble polymer in one or more protective layer containing hydrophobic polymer latex protective layer to impart the coating property thereof, and thereby provide a material as claimed.

7. Claims 10-11, 17, 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oya et al (US 2001/0051319A1) as applied to claims 1-7, 9-13, 15-24 above, and further in view of Derwent-Acc-No. 1982-84594E and Andrews et al (US Patent No. 4,113,854). Then gelation accelerator for starch composition is taught in Derwent-Acc-No. 1982-84594E. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use a known gelation accelerator taught in Derwent-Acc-No. 1982-84594E to increase the gelling rate of the water-soluble polymer including starches, and thereby provide the invention as claimed. The polysaccharide claimed in claims 22-24 have been known in Andrews et al in column 3, lines 30-45 and column 2, lines 34-49.

Response to Arguments

8. Applicant's arguments filed on June 21, 2005 have been fully considered but they are not persuasive for the reason set forth in the rejection above. There is no difference between the thickener taught in Oya et al and the gelling agent claimed in the present claimed invention because they are the same nature such as starches, seaweeds, vegetable adhesive substances (gum Arabic etc ..), animal proteins (glue, casein, gelatin, egg white) and adhesive fermentation product (pullulan, dextran) and semi-synthetic cellulose. See for instance the pullulan, dextran, gum Arabic, starch claimed in claim 9 or 15 vs. water-soluble polymer taught in Oya et al. The changing of the fluidity upon decreasing in temperature is inherent to that polymer. The protective layer taught in Oya et al is considered as the outermost layer within the meaning of the claimed invention. Accordingly, the invention as claimed would have been found obvious to the worker of ordinary skill in the art.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


Art Unit: 1752


however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea 
August 31, 2005


Thorl Chea
Primary Examiner
Art Unit 1752